What is claimed is:

1. A communications system comprising:

a plurality of regional ground stations;

a plurality of satellites located in a elliptical sub-geostationary orbit with respect to the earth, located in an elliptical sub-geostationary orbit with respect to the earth, said satellites operating in a service area in a synchronized manner to provide continuous coverage to said service area, said satellites generating a plurality of beams with variable beamwidth to obtain a substantially uniform cell size covering said service area; and

a plurality of user terminals with the service area receiving communication signals from the satellite.

2. A system as recited in claim 1 wherein said ground station is coupled to one selected from the group consisting of an internet service provider, a broadcast television center and a corporate internet.

3. A communications system as recited in claim 1 wherein said uniform cells are substantially fixed within said service area.

4. A communications system as recited in claim 1 wherein said plurality of beams provide equal capacity density to said cell size.

5. A communications system as recited in claim 1 wherein said minimum elevation angle is greater than 10 degrees in said service area.

6. A communications system as recited in claim 1 wherein within said service area is a primary market area

7. A communications system as recited in claim 1 wherein said first plurality of satellites comprise a phase array to form said plurality of beams.

8. A communications system as recited in claim 1 wherein said satellites are disabled when coextensive with a geostationary orbit.

9. A communications system as recited in claim 1 wherein said first plurality comprises less than 9 satellites.

10. A communications system as recited in claim 1 wherein said first plurality comprises 4 satellites.

11. A communications system as recited in claim 1 wherein said first plurality comprises 5 satellites.

12. A communications system comprising:

a first plurality of satellites located in an elliptical sub-geostationary orbit with respect to the earth, said satellites operating in a service area in a synchronized manner to provide continuous coverage to said service area, said satellites generating a plurality of beams with variable beamwidth to obtain a substantially uniform cell size covering said service area, said first plurality of satellites providing a first system capacity; and

a second plurality of satellites deployed after said first plurality of satellites, said second plurality of satellites providing a second system capacity greater than the first system capacity.

13. A communications system as recited in claim 12 wherein said uniform cells are substantially fixed within said service area.

14. A communications system as recited in claim 12 wherein said plurality of beams provide equal capacity density to said cell size.

15. A communications system as recited in claim 12 wherein said minimum elevation angle is greater than 10 degrees in said service area.

16. A communications system as recited in claim 12 wherein within said service area is a primary market area having an elevation greater than 30°.

17. A communications system as recited in claim 12 wherein said first plurality of satellites comprise a phase array to form said plurality of beams.

18. A communications system as recited in claim 12 wherein said satellites are disabled when coextensive with a geostationary orbit.

19. A communications system as recited in claim 12 wherein said first plurality comprises less than 9 satellites.

20. A communications system as recited in claim 12 wherein said first plurality comprises 4 satellites.

21. A communications system as recited in claim 12 wherein said first plurality comprises 5 satellites.

22. A method of providing a system of inclined eccentric sub-geosynchronous satellite orbits above the earth, the method comprising:

defining at least one geographic service area within which satellite coverage is to be provided, said service area having a minimum elevation angle thereabove;

defining at least two satellite orbits above the minimum service area having a first satellite and a second respectively therein;

operating said first satellite to generate a plurality of fixed cells relative to the earth by varying the beamwidth of the beams generated during operation in an active arc of an orbit;

handing over operation from the first satellite to the second satellite to maintain at least the minimum elevation angle; and

operating said second satellite to generate the plurality of fixed cells by varying the beamwidth of the beams generated during operation in the active arc of an orbit.

23. A method as recited in claim 19 wherein said satellite orbits are inclined eccentric sub-geosynchronous orbit.

24. A method as recited in claim 24 wherein said step of defining at least two satellite orbits comprises defining at least four obits.

25. A method of developing customized satellite constellation comprising the steps of:

developing a first satellite constellation having a first set of satellites having regional coverage having a first service area;

launching a second set of satellites to form a second satellite constellation having primary market coverage in cooperation with said first set of satellites to have a second service area greater than said first service area.

26. A method as recited in claim 26 comprising launching a third set of satellites to form a third satellite constellation having optimized landmass coverage in cooperation with said first set of satellites and said second set of satellites having a third service area greater than said second service area.

Sub B1

27. A method as recited in claim 27 wherein said first constellation, said second constellation and said third constellation comprise SGSO satellites.

28. A method as recited in claim 26 wherein said first set of satellites are non-interfering with GSO satellites.

29. A method as recited in claim 26 wherein said second set of satellites are non-interfering with GSO satellites.

30. A method as recited in claim 27 wherein said first plurality of satellites and said second set of satellites have active arcs sized to provide continuous coverage to said second service area.

31. A method as recited in claim 27 wherein said first plurality of satellites and said second set of satellites have active arcs sized to be non-interfering with GSO satellites.

ADD A7